

MASSACHUSETTS RARE AND ENDANGERED WILDLIFE

Arctic Tern Sterna paradisaea

DESCRIPTION The adult Arctic Tern is a small, coastal bird 14-17 inches (35-43 cm) in length and 3-4 oz. (107g) in weight. It has a white body with a gray back between the wings (mantle), a black capped head, a blood-red bill, and a deeply forked tail. It has a wingspread of 29-33 inches (65-90 cm). Its most distinguishing features are its short red legs and its long tail which extends to the end of its folded wings. Its small feet and short legs make it appear to be crouching on the ground when it is actually standing. Juveniles have a short black bill, white forehead, short legs and a sooty colored area from its eye to the nape of its neck. The Arctic Tern has a high pitched squeaky call of "kee-kee," "kip, kip, kip-TEE-ar," and a short "kee-kahr."

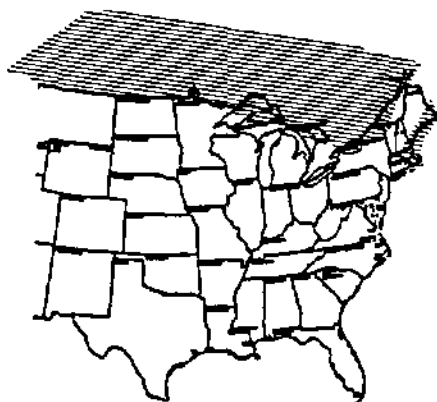


The Audubon Society Field
Guide to North American Birds.
Bull and Farrand, Jr. 1977

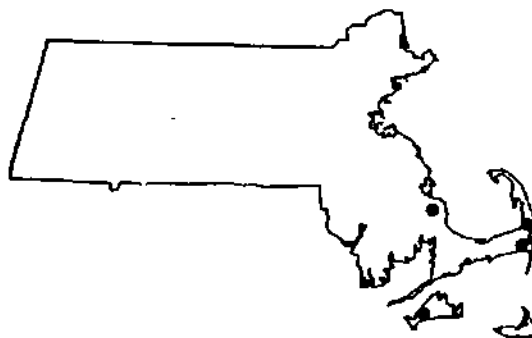
SIMILAR SPECIES The Arctic Tern is distinguished from the very similar Common Tern (Sterna hirundo) by its shorter legs and bill, longer tail and grayer underparts. The tail of the Arctic Tern reaches to the tip of its folded wings whereas the Common Tern's does not. In addition, the Arctic Tern's thinner bill is completely red during the breeding season whereas the Common Tern's has a black tip. In comparison to the Common Tern, the Arctic Tern's voice is more abrasive and higher pitched.

RANGE The Arctic Tern has a circumpolar range. In summer, it occurs as far north as there is open water; from northern Alaska and Ellesmere Island, east to British Columbia,

(Continued overleaf)



Range



- Verified since 1978
- Reported prior to 1978

Breeding Distribution in Massachusetts
by Town

northern Manitoba, Quebec, Newfoundland, and along the coast of Maine and Massachusetts. Massachusetts is at the southern edge of its breeding range. The Arctic Tern winters on the Antarctic pack-ice as well as off the South African coast.

MIGRATION In Massachusetts, Arctic Terns arrive on their breeding grounds in mid May and depart as soon as the young can fly which is usually in early August. From Cape Cod they cross the Atlantic Ocean to Africa and then head south to the open water off Antarctica. The Arctic Tern has been called the "champion migrant" flying up to 22,000 miles round trip from its summer nesting sites in the north over the Atlantic and Pacific Oceans to its wintering grounds near the Antarctic Circle. It is thought that this bird sees more daylight than any other animal in existence.

HABITAT IN MASSACHUSETTS The Arctic Tern is found in sandy gravelly areas on islands and barrier spits. Occasionally, they occur on mainland shores.

FEEDING HABITS The Arctic Tern feeds on small fish such as sand lance, capelin, herring, and minnows as well as on invertebrates and small crustaceans. When feeding, this tern will hover over the water and dive from heights of 30 to 40 feet splashing the surface and becoming submerged.

LIFE HISTORY/ECOLOGY The Arctic Tern nests in colonies ranging from several to tens of thousands of pairs. In Massachusetts, they are found with Common and Least Terns. Individuals begin breeding at 3 to 4 years of age. The female Arctic Tern scrapes out a nest in the area beyond the high tide mark and occasionally uses dune grass to line it. Eggs are laid between May 28 and June 15 in Massachusetts and clutches contain 1 or 2 brownish-green eggs. The female is mainly responsible for incubating the eggs, and brooding and feeding the young. Incubation lasts approximately 21 days and the young fledge 21 to 24 days after hatching. Arctic Terns do not renest if their initial brood is lost to predation or storms.

POPULATION STATUS The Arctic Tern is listed as a Species of Special Concern by the Massachusetts Division of Fisheries and Wildlife. Records of this species have been inconsistent in the past due to the difficulty of identifying this bird and distinguishing it from the Common Tern. However, it is generally believed that in Massachusetts, the Arctic Tern was very rare in the late 1800's and required a longer period of time to recover from the deleterious effects of the millinery trade than the Common or Least Terns. On Cape Cod in 1937 and 1938, 60 pairs of Arctic Terns were reported, in 1946 and 1947, 280 pairs were found, and between 1968 and 1972, 110 pairs were reported. These numbers may not reflect an entirely accurate picture of the Arctic Tern population in Massachusetts due to the reasons cited above.

Since the apparent peak in population numbers during the late 1940's, the Arctic Tern has experienced a noticeable decline. In 1986, 24 pairs were recorded increasing to 29 pairs in 1987. It is not known precisely what has caused such a decline in Arctic Terns since legal protection was installed in the early 1900's prohibiting plume taking. As Massachusetts is at the southern edge of the species' breeding range, it is possible that the Arctic Tern will always occur in limited numbers in the state. However, predation and human disturbance have had considerable impact on this tern's success and are partly the cause of the significant decline of Arctic Tern's since the late 1940's. In all 4 sites currently known to contain Arctic Terns, avian, insect, and mammalian predation on eggs and chicks has occurred. Predators such as the Great Black-backed and Laughing Gulls, Great Horned and Short-eared Owls, skunks, rats, and ants have destroyed eggs and chicks at nesting sites. Calamities such as unusually high tides additionally contribute to egg and chick mortality.